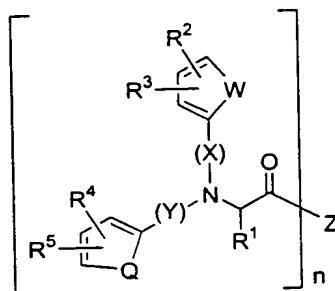


What is claimed is

1. A compound of Formula I



I

wherein:

$R^1$  is the side chain of a natural or unnatural  $\alpha$ -amino acids, where if said side chain contains a protectable group, that group may be protected with a member of the group consisting of succinyl, glutaryl, 3,3-dimethylglutaryl,  $C_{1-5}$ alkyl,  $C_{1-5}$ alkoxycarbonyl, acetyl, N-(9-fluorenylmethoxycarbonyl), trifluoroacetyl, omega-carboxy $C_{1-5}$ alkylcarbonyl, *t*-butoxycarbonyl, benzyl, benzyloxycarbonyl, 2-chlorobenzyloxycarbonyl, phenylsulfonyl, ureido, *t*-butyl, cinnamoyl, trityl, 4-methyltrityl, 1-(4,4-dimethyl-2,6-dioxocyclohexylidene)ethyl, tosyl, 4-methoxy-2,3,6-trimethylbenzenesulfonyl, phenylureido, and substituted phenylureido (where the phenyl substituents are phenoxy, halo,  $C_{1-5}$ alkoxycarbonyl);

$R^2$  and  $R^3$

may be taken together to form a six-membered aromatic ring which is fused to the depicted ring, or

are independently selected from the group consisting of hydrogen, C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, amino, phenyl, phenoxy, phenylC<sub>1-5</sub>alkyl, phenyl C<sub>1-5</sub>alkoxy, substituted phenyl (where the substituents are selected from C<sub>1-5</sub>alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkyl (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino), and

substituted amino (where the substituents are selected from one or more members of the group consisting of C<sub>1-5</sub>alkyl, halosubstitutedC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, phenyl, phenylC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkylcarbonyl, halo substituted C<sub>1-5</sub>alkylcarbonyl, carboxyC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxyC<sub>1-5</sub>alkyl, cinnamoyl, naphthylcarbonyl, furylcarbonyl, pyridylcarbonyl, C<sub>1-5</sub>alkylsulfonyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, phenylC<sub>1-5</sub>alkylsulfonyl substituted phenylcarbonyl, substituted phenylC<sub>1-5</sub>alkylcarbonyl, substituted phenylsulfonyl, substituted phenylC<sub>1-5</sub>alkylsulfonyl, substituted phenyl, and substituted phenylC<sub>1-5</sub>alkyl[where the aromatic phenyl, phenylC<sub>1-5</sub>alkyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, and

phenylC<sub>1-5</sub>alkylsulfonyl substituents are independently selected from one to five members of the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino)];

5

R<sup>4</sup> and R<sup>5</sup>

may be taken together to form a six-membered aromatic ring which is fused to the depicted ring, or

10

are independently selected from the group consisting of hydrogen, C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, amino, phenyl, phenoxy, phenylC<sub>1-5</sub>alkyl, phenyl C<sub>1-5</sub>alkoxy, substituted phenyl (where the substituents are selected from C<sub>1-5</sub>alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

15

substituted phenoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

20

substituted phenylC<sub>1-5</sub>alkyl (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino), and

25

substituted amino (where the substituents are selected from one or more members of the group consisting of C<sub>1-5</sub>alkyl, halosubstitutedC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenyl, phenyl, phenylC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkylcarbonyl, halo substituted C<sub>1-5</sub>alkylcarbonyl, carboxyC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxyC<sub>1-5</sub>alkyl,

5 cinnamoyl, naphthylcarbonyl, furylcarbonyl, pyridylcarbonyl,  
C<sub>1-5</sub>alkylsulfonyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl,  
phenylsulfonyl, phenylC<sub>1-5</sub>alkylsulfonyl substituted  
phenylcarbonyl, substituted phenylC<sub>1-5</sub>alkylcarbonyl, substituted  
phenylsulfonyl, substituted phenylC<sub>1-5</sub>alkylsulfonyl, substituted  
10 phenyl, and substituted phenylC<sub>1-5</sub>alkyl [where the aromatic  
phenyl, phenylC<sub>1-5</sub>alkyl, phenylcarbonyl,  
phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, and  
phenylC<sub>1-5</sub>alkylsulfonyl substituents are independently selected  
from one to five members of the group consisting of C<sub>1-5</sub>alkyl,  
C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and  
amino]);

15 W is selected from the group consisting of -CH=CH-, -S-, and -CH=N-;

Q is selected from the group consisting of -CH=CH-, -S-, and -CH=N-;

20 X is selected from the group consisting of carbonyl, C<sub>1-5</sub>alkyl,  
C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenylcarbonyl, and (CH<sub>2</sub>)<sub>m</sub>-C(O)- where m is 2-5;

Y is selected from the group consisting of carbonyl, C<sub>1-5</sub>alkyl,  
C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenylcarbonyl, and (CH<sub>2</sub>)<sub>m</sub>-C(O)- where m is 2-5;

25 n is 1, 2, or 3;

Z is selected from the group consisting of hydroxy, C<sub>1-5</sub> alkoxy,  
phenoxy, phenylC<sub>1-5</sub>alkoxy, amino, C<sub>1-5</sub>alkylamino,  
diC<sub>1-5</sub>alkylamino, phenylamino, phenylC<sub>1-5</sub>alkylamino,

piperidin-1-yl

substituted piperidin-1-yl (where the substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, halo, aminocarbonyl, C<sub>1-5</sub>alkoxycarbonyl, and oxo;

5 substituted phenylC<sub>1-5</sub>alkylamino (where the aromatic substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, phenylC<sub>1-5</sub>alkenyloxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino),

10 substituted phenoxy (where the aromatic substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkoxy (where the aromatic substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino),

15 -OCH<sub>2</sub>CH<sub>2</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>OCH<sub>2</sub>CH<sub>2</sub>O-,

-NHCH<sub>2</sub>CH<sub>2</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>OCH<sub>2</sub>CH<sub>2</sub>NH-,

-NH(CH<sub>2</sub>)<sub>p</sub>O(CH<sub>2</sub>)<sub>q</sub>O(CH<sub>2</sub>)<sub>p</sub>NH-, -NH(CH<sub>2</sub>)<sub>q</sub>NCH<sub>3</sub>(CH<sub>2</sub>)<sub>s</sub>NH-,

-NH(CH<sub>2</sub>)<sub>s</sub>NH-, and (NH(CH<sub>2</sub>)<sub>s</sub>)<sub>3</sub>N,

where s, p, and q are independently selected from 1-7

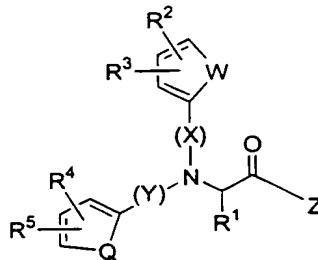
20 with the proviso that if n is 2, Z is not hydroxy, C<sub>1-5</sub>alkoxy, amino, C<sub>1-5</sub>alkylamino, diC<sub>1-5</sub>alkylamino, phenylamino, or phenylC<sub>1-5</sub>alkylamino, piperidin-1-yl

with the further proviso that if n is 3, Z is (NH(CH<sub>2</sub>)<sub>s</sub>)<sub>3</sub>N.

and salts thereof.

25 2. The compounds of claim 1 wherein said compound binds to the EPO receptor.

3. A method for modulating EPO receptor, comprising contacting the EPO receptor with an amount of the compound of claim 1.
4. A method for treating a disease or condition mediated by EPO receptor comprising administering an effective amount of the compound of claim 1.
5. A pharmaceutical composition comprising the compound of claim 1.
6. An EPO receptor modulating compound of the formula



wherein:

R¹ is the side chain of a natural or unnatural  $\alpha$ -amino acids, where if said side chain contains a protectable group, that group may be protected with a member of the group consisting of succinyl, glutaryl, 3,3-dimethylglutaryl, C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxycarbonyl, acetyl, N-(9-fluorenylmethoxycarbonyl), trifluoroacetyl, omega-carboxyC<sub>1-5</sub>alkylcarbonyl, *t*-butoxycarbonyl, benzyl, benzyloxycarbonyl, 2-chlorobenzyloxycarbonyl, phenylsulfonyl, ureido, *t*-butyl, cinnamoyl, trityl, 4-methyltrityl, 1-(4,4-dimethyl-2,6-dioxocyclohexylidene)ethyl, tosyl, 4-methoxy-2,3,6-trimethylbenzenesulfonyl, phenylureido, and substituted

phenylureido (where the phenyl substituents are phenoxy, halo, C<sub>1-5</sub>alkoxycarbonyl);

R<sup>2</sup> and R<sup>3</sup>

5 may be taken together to form a six-membered aromatic ring which is fused to the depicted ring, or  
are independently selected from the group consisting of hydrogen, C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, amino, phenyl, phenoxy, phenylC<sub>1-5</sub>alkyl, phenyl C<sub>1-5</sub>alkoxy,  
10 substituted phenyl (where the substituents are selected from C<sub>1-5</sub>alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),  
substituted phenoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),  
15 substituted phenylC<sub>1-5</sub>alkyl (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),  
substituted phenylC<sub>1-5</sub>alkoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino), and  
20 substituted amino (where the substituents are selected from one or more members of the group consisting of C<sub>1-5</sub>alkyl, halosubstitutedC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenyl, phenyl, phenylC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkylcarbonyl, halo substituted C<sub>1-5</sub>alkylcarbonyl, carboxyC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxyC<sub>1-5</sub>alkyl, cinnamoyl, naphthylcarbonyl, furylcarbonyl, pyridylcarbonyl, C<sub>1-5</sub>alkylsulfonyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl,  
25

phenylsulfonyl, phenylC<sub>1-5</sub>alkylsulfonyl substituted  
phenylcarbonyl, substituted phenylC<sub>1-5</sub>alkylcarbonyl, substituted  
phenylsulfonyl, substituted phenylC<sub>1-5</sub>alkylsulfonyl, substituted  
phenyl, and substituted phenylC<sub>1-5</sub>alkyl[where the aromatic  
5 phenyl, phenylC<sub>1-5</sub>alkyl, phenylcarbonyl,  
phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, and  
phenylC<sub>1-5</sub>alkylsulfonyl substituents are independently selected  
from one to five members of the group consisting of C<sub>1-5</sub>alkyl,  
C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and  
10 amino)];

R<sup>4</sup> and R<sup>5</sup>

may be taken together to form a six-membered aromatic ring which is  
fused to the depicted ring, or  
15 are independently selected from the group consisting of hydrogen,  
C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, amino,  
phenyl, phenoxy, phenylC<sub>1-5</sub>alkyl, phenyl C<sub>1-5</sub>alkoxy,  
substituted phenyl (where the substituents are selected from C<sub>1-5</sub>alkyl,  
C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and  
20 amino),  
substituted phenoxy (where the substituents are selected from C<sub>1-5</sub>  
alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano,  
and amino),  
substituted phenylC<sub>1-5</sub>alkyl (where the substituents are selected from  
25 C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro,  
cyano, and amino),



substituted phenylC<sub>1-5</sub>alkoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino), and

substituted amino (where the substituents are selected from one or more members of the group consisting of C<sub>1-5</sub>alkyl, halosubstitutedC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkynyl, phenyl, phenylC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkylcarbonyl, halo substituted C<sub>1-5</sub>alkylcarbonyl, carboxyC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxyC<sub>1-5</sub>alkyl, cinnamoyl, naphthylcarbonyl, furylcarbonyl, pyridylcarbonyl, C<sub>1-5</sub>alkylsulfonyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, phenylC<sub>1-5</sub>alkylsulfonyl substituted phenylcarbonyl, substituted phenylC<sub>1-5</sub>alkylcarbonyl, substituted phenylsulfonyl, substituted phenylC<sub>1-5</sub>alkylsulfonyl, substituted phenyl, and substituted phenylC<sub>1-5</sub>alkyl [where the aromatic phenyl, phenylC<sub>1-5</sub>alkyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, and phenylC<sub>1-5</sub>alkylsulfonyl substituents are independently selected from one to five members of the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino]);

W is selected from the group consisting of -CH=CH-, -S-, and -CH=N-;

Q is selected from the group consisting of -CH=CH-, -S-, and -CH=N-;

X is selected from the group consisting of carbonyl, C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenylcarbonyl, and (CH<sub>2</sub>)<sub>m</sub>-C(O)- where m is 2-5;

Y is selected from the group consisting of carbonyl, C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenylcarbonyl, and (CH<sub>2</sub>)<sub>m</sub>-C(O)- where m is 2-5;

Z is selected from the group consisting of hydroxy, C<sub>1-5</sub> alkoxy, phenoxy, phenylC<sub>1-5</sub>alkoxy, amino, C<sub>1-5</sub>alkylamino, diC<sub>1-5</sub>alkylamino, phenylamino, phenylC<sub>1-5</sub>alkylamino, piperidin-1-yl

substituted piperidin-1-yl (where the substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, halo, aminocarbonyl, C<sub>1-5</sub>alkoxycarbonyl, and oxo;

substituted phenylC<sub>1-5</sub>alkylamino (where the aromatic substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, phenylC<sub>1-5</sub>alkenyl, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino),

substituted phenoxy (where the aromatic substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkoxy (where the aromatic substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino),

-OCH<sub>2</sub>CH<sub>2</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>OCH<sub>2</sub>CH<sub>2</sub>O-,

-NHCH<sub>2</sub>CH<sub>2</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>OCH<sub>2</sub>CH<sub>2</sub>NH-,

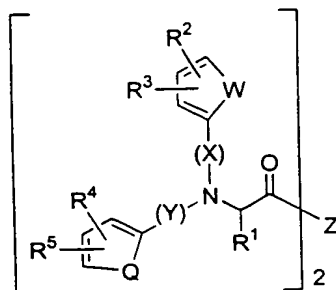
-NH(CH<sub>2</sub>)<sub>p</sub>O(CH<sub>2</sub>)<sub>q</sub>O(CH<sub>2</sub>)<sub>p</sub>NH-, -NH(CH<sub>2</sub>)<sub>q</sub>NCH<sub>3</sub>(CH<sub>2</sub>)<sub>s</sub>NH-,

-NH(CH<sub>2</sub>)<sub>s</sub>NH-, and (NH(CH<sub>2</sub>)<sub>s</sub>)<sub>3</sub>N,

where s, p, and q are independently selected from 1-7

and pharmaceutically acceptable salts thereof.

7. An EPO receptor modulating compound of the Formula



wherein:

$R^1$  is the side chain of a natural or unnatural  $\alpha$ -amino acids, where if said side chain contains a protectable group, that group may be protected with a member of the group consisting of succinyl, glutaryl, 3,3-dimethylglutaryl,  $C_{1-5}$ alkyl,  $C_{1-5}$ alkoxycarbonyl, acetyl, N-(9-fluorenylmethoxycarbonyl), trifluoroacetyl, omega-carboxy $C_{1-5}$ alkylcarbonyl, *t*-butoxycarbonyl, benzyl, benzyloxycarbonyl, 2-chlorobenzyloxycarbonyl, phenylsulfonyl, ureido, *t*-butyl, cinnamoyl, trityl, 4-methyltrityl, 1-(4,4-dimethyl-2,6-dioxocyclohexylidene)ethyl, tosyl, 4-methoxy-2,3,6-trimethylbenzenesulfonyl, phenylureido, and substituted phenylureido (where the phenyl substituents are phenoxy, halo,  $C_{1-5}$ alkoxycarbonyl);

$R^2$  and  $R^3$

may be taken together to form a six-membered aromatic ring which is fused to the depicted ring, or are independently selected from the group consisting of hydrogen,  $C_{1-5}$  alkyl,  $C_{1-5}$  alkoxy, hydroxy, halo, trifluoromethyl, nitro, amino, phenyl, phenoxy, phenyl $C_{1-5}$ alkyl, phenyl  $C_{1-5}$ alkoxy,

substituted phenyl (where the substituents are selected from C<sub>1-5</sub>alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkyl (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino), and

substituted amino (where the substituents are selected from one or more members of the group consisting of C<sub>1-5</sub>alkyl, halosubstitutedC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenyl, phenyl, phenylC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkylcarbonyl, halo substituted C<sub>1-5</sub>alkylcarbonyl, carboxyC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxyC<sub>1-5</sub>alkyl, cinnamoyl, naphthylcarbonyl, furylcarbonyl, pyridylcarbonyl, C<sub>1-5</sub>alkylsulfonyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, phenylC<sub>1-5</sub>alkylsulfonyl substituted phenylcarbonyl, substituted phenylC<sub>1-5</sub>alkylcarbonyl, substituted phenylsulfonyl, substituted phenylC<sub>1-5</sub>alkylsulfonyl, substituted phenyl, and substituted phenylC<sub>1-5</sub>alkyl[where the aromatic phenyl, phenylC<sub>1-5</sub>alkyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, and phenylC<sub>1-5</sub>alkylsulfonyl substituents are independently selected from one to five members of the group consisting of C<sub>1-5</sub>alkyl,

C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino]);

R<sup>4</sup> and R<sup>5</sup>

5 may be taken together to form a six-membered aromatic ring which is fused to the depicted ring, or  
are independently selected from the group consisting of hydrogen, C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, amino, phenyl, phenoxy, phenylC<sub>1-5</sub>alkyl, phenyl C<sub>1-5</sub>alkoxy,  
10 substituted phenyl (where the substituents are selected from C<sub>1-5</sub>alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),  
substituted phenoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),  
15 substituted phenylC<sub>1-5</sub>alkyl (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),  
substituted phenylC<sub>1-5</sub>alkoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino), and  
20 substituted amino (where the substituents are selected from one or more members of the group consisting of C<sub>1-5</sub>alkyl, halosubstitutedC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, phenyl, phenylC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkylcarbonyl, halo substituted C<sub>1-5</sub>alkylcarbonyl, carboxyC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxyC<sub>1-5</sub>alkyl, cinnamoyl, naphthylcarbonyl, furylcarbonyl, pyridylcarbonyl, C<sub>1-5</sub>alkylsulfonyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl,

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- phenylsulfonyl, phenylC<sub>1-5</sub>alkylsulfonyl substituted  
phenylcarbonyl, substituted phenylC<sub>1-5</sub>alkylcarbonyl, substituted  
phenylsulfonyl, substituted phenylC<sub>1-5</sub>alkylsulfonyl, substituted  
phenyl, and substituted phenylC<sub>1-5</sub>alkyl [where the aromatic  
5 phenyl, phenylC<sub>1-5</sub>alkyl, phenylcarbonyl,  
phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, and  
phenylC<sub>1-5</sub>alkylsulfonyl substituents are independently selected  
from one to five members of the group consisting of C<sub>1-5</sub>alkyl,  
C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and  
10 amino]);
- W is selected from the group consisting of -CH=CH-, -S-, and -CH=N-;
- Q is selected from the group consisting of -CH=CH-, -S-, and -CH=N-;
- 15 X is selected from the group consisting of carbonyl, C<sub>1-5</sub>alkyl,  
C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenylcarbonyl, and (CH<sub>2</sub>)<sub>m</sub>-C(O)- where m is 2-5;
- Y is selected from the group consisting of carbonyl, C<sub>1-5</sub>alkyl,  
20 C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenylcarbonyl, and (CH<sub>2</sub>)<sub>m</sub>-C(O)- where m is 2-5;
- Z is selected from the group consisting of phenoxy, phenylC<sub>1-5</sub>alkoxy,  
substituted piperidin-1-yl (where the substituents are selected from  
the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, halo,  
aminocarbonyl, C<sub>1-5</sub>alkoxycarbonyl, and oxo;  
25 substituted phenylC<sub>1-5</sub>alkylamino (where the aromatic substituents  
are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy,

phenylC<sub>1-5</sub>alkenyloxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino),

substituted phenoxy (where the aromatic substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkoxy (where the aromatic substituents are selected from the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino),

-OCH<sub>2</sub>CH<sub>2</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>OCH<sub>2</sub>CH<sub>2</sub>O-,

-NHCH<sub>2</sub>CH<sub>2</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>OCH<sub>2</sub>CH<sub>2</sub>NH-,

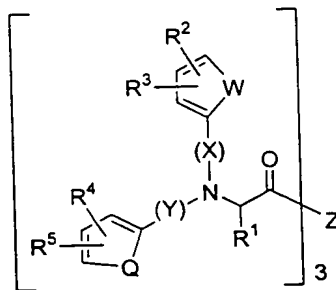
-NH(CH<sub>2</sub>)<sub>p</sub>O(CH<sub>2</sub>)<sub>q</sub>O(CH<sub>2</sub>)<sub>p</sub>NH-, -NH(CH<sub>2</sub>)<sub>q</sub>NCH<sub>3</sub>(CH<sub>2</sub>)<sub>s</sub>NH-,

-NH(CH<sub>2</sub>)<sub>s</sub>NH-, and (NH(CH<sub>2</sub>)<sub>s</sub>)<sub>3</sub>N,

where s, p, and q are independently selected from 1-7

and the pharmaceutically acceptable salts thereof.

8. An EPO receptor modulating compound of the Formula



wherein:

R<sup>1</sup> is the side chain of a natural or unnatural α-amino acids, where if said side chain contains a protectable group, that group may be protected with a member of the group consisting of succinyl, glutaryl, 3,3-

dimethylglutaryl, C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxycarbonyl, acetyl, N-(9-fluorenylmethoxycarbonyl), trifluoroacetyl, omega-carboxyC<sub>1-5</sub>alkylcarbonyl, *t*-butoxycarbonyl, benzyl, benzyloxycarbonyl, 2-chlorobenzyloxycarbonyl, phenylsulfonyl, ureido, *t*-butyl, cinnamoyl, trityl, 4-methyltrityl, 1-(4,4-dimethyl-2,6-dioxocyclohexylidene)ethyl, tosyl, 4-methoxy-2,3,6-trimethylbenzenesulfonyl, phenylureido, and substituted phenylureido (where the phenyl substituents are phenoxy, halo, C<sub>1-5</sub>alkoxycarbonyl);

R<sup>2</sup> and R<sup>3</sup>

may be taken together to form a six-membered aromatic ring which is fused to the depicted ring, or

are independently selected from the group consisting of hydrogen, C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, amino, phenyl, phenoxy, phenylC<sub>1-5</sub>alkyl, phenyl C<sub>1-5</sub>alkoxy,

substituted phenyl (where the substituents are selected from C<sub>1-5</sub>alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkyl (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino), and



substituted amino (where the substituents are selected from one or more members of the group consisting of C<sub>1-5</sub>alkyl, halosubstitutedC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkynyl, phenyl, phenylC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkylcarbonyl, halo substituted C<sub>1-5</sub>alkylcarbonyl, carboxyC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxyC<sub>1-5</sub>alkyl, cinnamoyl, naphthylcarbonyl, furylcarbonyl, pyridylcarbonyl, C<sub>1-5</sub>alkylsulfonyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, phenylC<sub>1-5</sub>alkylsulfonyl substituted phenylcarbonyl, substituted phenylC<sub>1-5</sub>alkylcarbonyl, substituted phenylsulfonyl, substituted phenylC<sub>1-5</sub>alkylsulfonyl, substituted phenyl, and substituted phenylC<sub>1-5</sub>alkyl[where the aromatic phenyl, phenylC<sub>1-5</sub>alkyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, and phenylC<sub>1-5</sub>alkylsulfonyl substituents are independently selected from one to five members of the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino]);

R<sup>4</sup> and R<sup>5</sup>

may be taken together to form a six-membered aromatic ring which is fused to the depicted ring, or

are independently selected from the group consisting of hydrogen, C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, amino, phenyl, phenoxy, phenylC<sub>1-5</sub>alkyl, phenyl C<sub>1-5</sub>alkoxy,

substituted phenyl (where the substituents are selected from C<sub>1-5</sub>alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkyl (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino),

substituted phenylC<sub>1-5</sub>alkoxy (where the substituents are selected from C<sub>1-5</sub> alkyl, C<sub>1-5</sub> alkoxy, hydroxy, halo, trifluoromethyl, nitro, cyano, and amino), and

substituted amino (where the substituents are selected from one or more members of the group consisting of C<sub>1-5</sub>alkyl, halosubstitutedC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkenyl, C<sub>1-5</sub>alkenyl, phenyl, phenylC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkylcarbonyl, halo substituted C<sub>1-5</sub>alkylcarbonyl, carboxyC<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxyC<sub>1-5</sub>alkyl, cinnamoyl, naphthylcarbonyl, furylcarbonyl, pyridylcarbonyl, C<sub>1-5</sub>alkylsulfonyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, phenylC<sub>1-5</sub>alkylsulfonyl substituted phenylcarbonyl, substituted phenylC<sub>1-5</sub>alkylcarbonyl, substituted phenylsulfonyl, substituted phenylC<sub>1-5</sub>alkylsulfonyl, substituted phenyl, and substituted phenylC<sub>1-5</sub>alkyl [where the aromatic phenyl, phenylC<sub>1-5</sub>alkyl, phenylcarbonyl, phenylC<sub>1-5</sub>alkylcarbonyl, phenylsulfonyl, and phenylC<sub>1-5</sub>alkylsulfonyl substituents are independently selected from one to five members of the group consisting of C<sub>1-5</sub>alkyl, C<sub>1-5</sub>alkoxy, hydroxy, halogen, trifluoromethyl, nitro, cyano, and amino]);

W is selected from the group consisting of -CH=CH-, -S-, and -CH=N-;

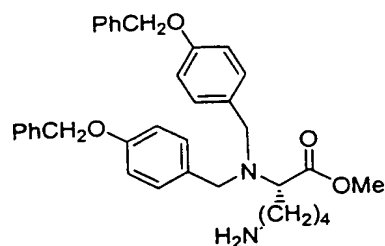
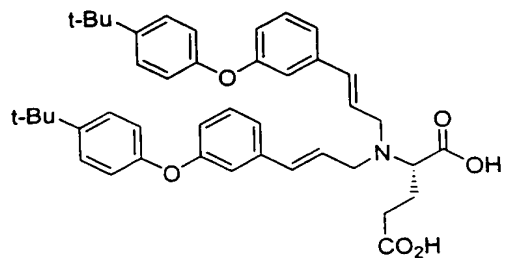
Q is selected from the group consisting of  $-\text{CH}=\text{CH}-$ ,  $-\text{S}-$ , and  $-\text{CH}=\text{N}-$ ;

X is selected from the group consisting of carbonyl,  $\text{C}_{1-5}$ alkyl,  $\text{C}_{1-5}$ alkenyl,  $\text{C}_{1-5}$ alkenylcarbonyl, and  $(\text{CH}_2)_m-\text{C}(\text{O})-$  where m is 2-5;

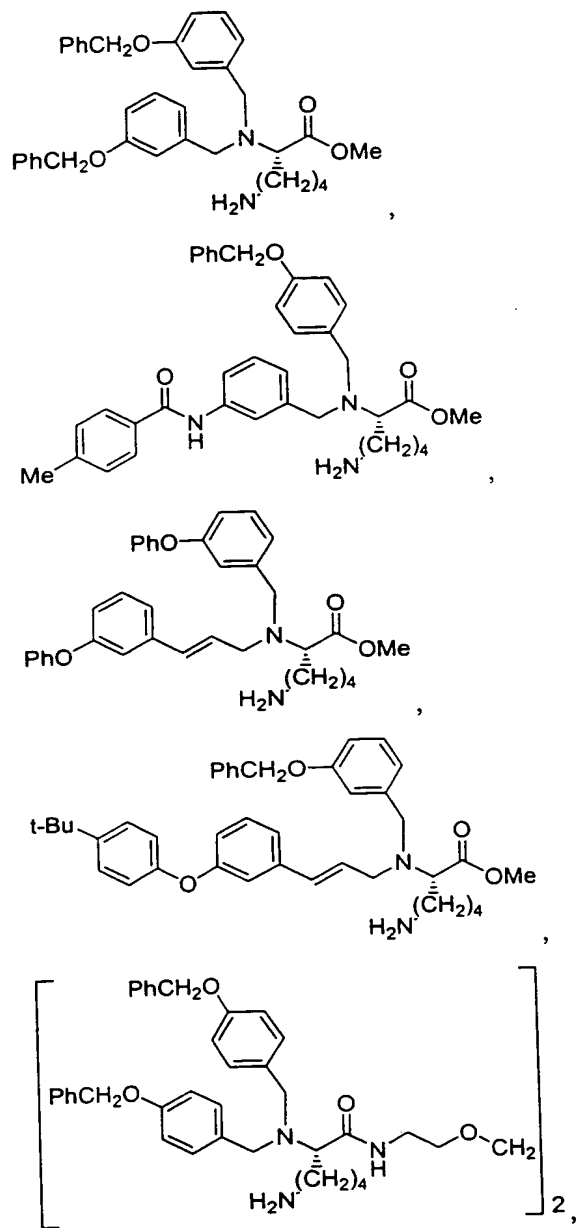
Y is selected from the group consisting of carbonyl,  $\text{C}_{1-5}$ alkyl,  $\text{C}_{1-5}$ alkenyl,  $\text{C}_{1-5}$ alkenylcarbonyl, and  $(\text{CH}_2)_m-\text{C}(\text{O})-$  where m is 2-5;

Z is  $(\text{NH}(\text{CH}_2)_5)_3\text{N}$   
and pharmaceutically acceptable salts thereof.

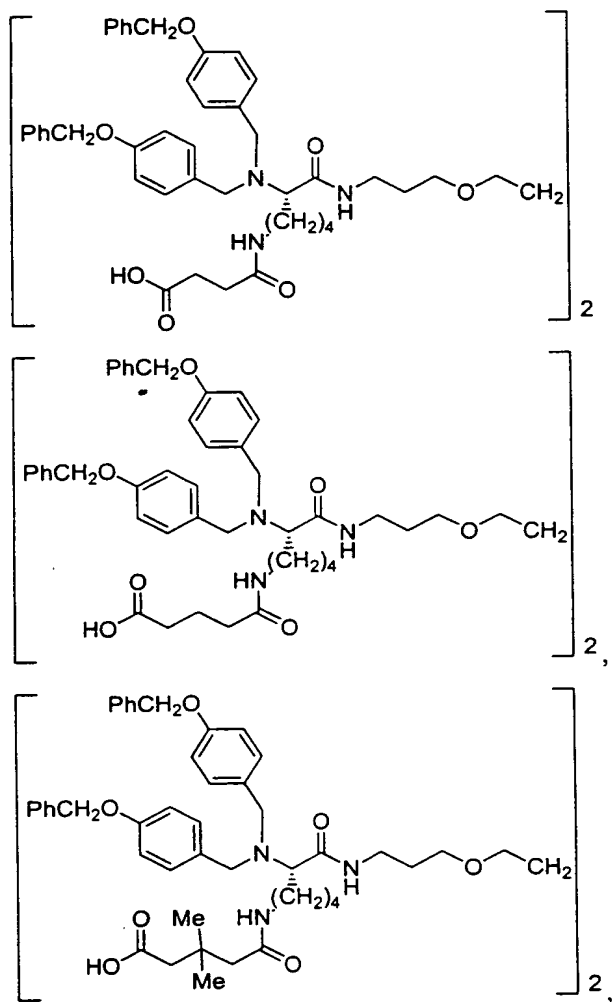
9. A compound selected from the group consisting of

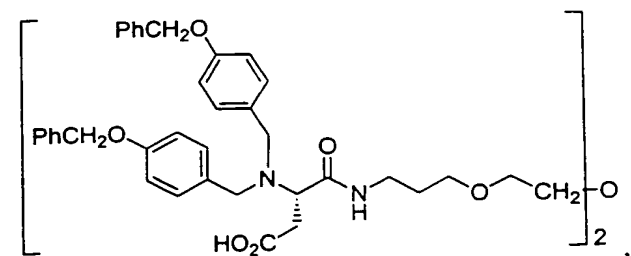
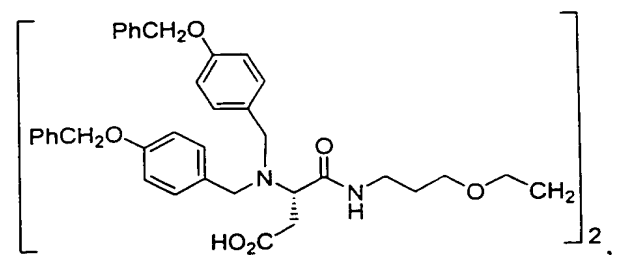
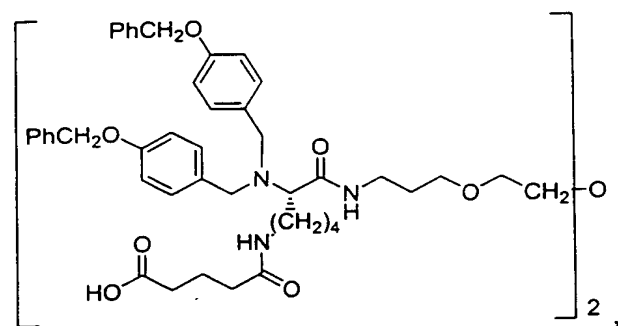
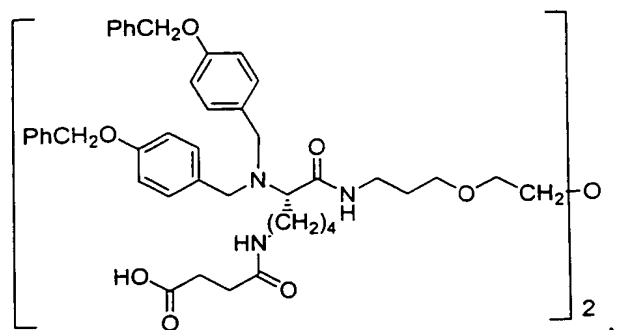


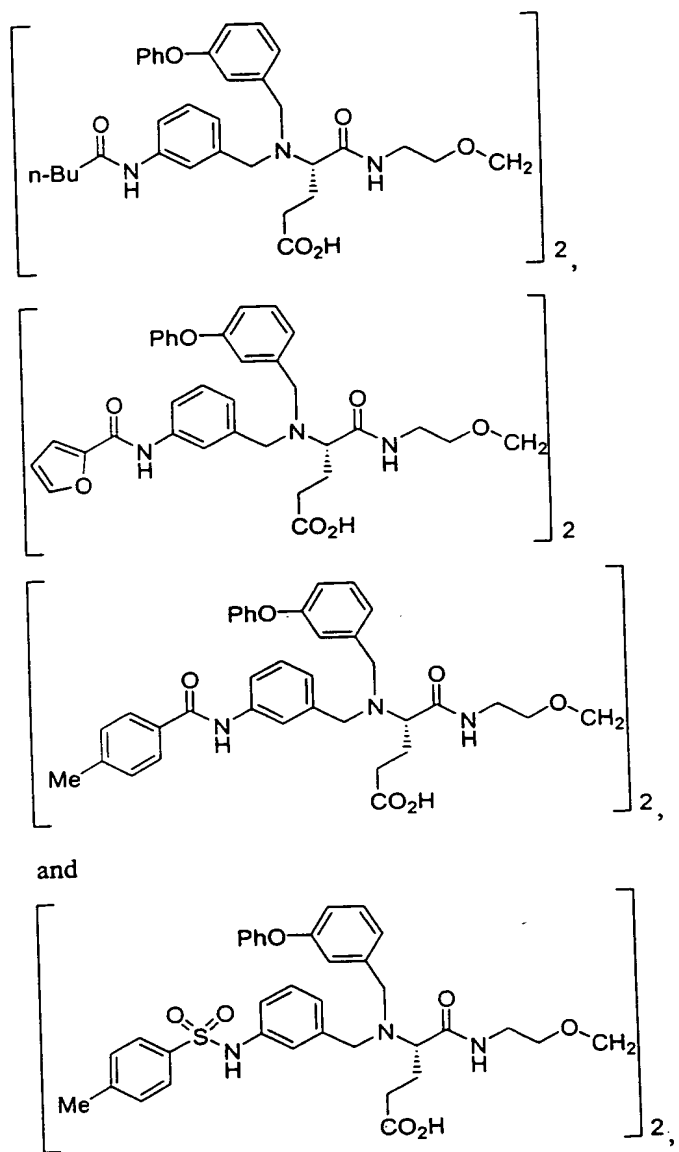
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5

and salts thereof.

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10. The compounds of claim 9 wherein said compound binds to the EPO receptor.

11. A method for modulating EPO receptor, comprising contacting the EPO receptor with an EPO receptor modulating amount of the compound of claim 9.

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12. A method for treating a disease or condition mediated by EPO receptor comprising administering an effective amount of the compound of claim 9.

13. A pharmaceutical composition comprising the compound of claim 9.